

CLAIMS

What is claimed is:

1. An apparatus for adjusting ambient air temperature, comprising:

a single base unit, configured to receive an input at said ambient air temperature and generate a base unit output;

a first attachment unit, attachable to said single base unit and configured to receive said base unit output and generate a heated output; and

a second attachment unit, attachable to said single base unit and configured to receive said base unit output and output a cooled output generated in the single base unit.

2. The apparatus of claim 1, said single base unit comprising:

a blower that operates in accordance with a motor.

3. The apparatus of claim 1, said single base unit comprising:

a fuel source to provide a heating fuel to said first attachment unit; and

an affixing device to attach said fuel source container to said single base unit.

4. The apparatus of claim 1, said single base unit comprising:

a water reservoir configured to hold a prescribed volume of water;

a sump that pumps said water from said water reservoir to at least one drip source positioned at an upper edge of said single base unit; and

at least one evaporative cooling medium, positioned within a frame of said single base unit, that receives said water from said drip source, wherein said ambient air is evaporatively cooled at said at least one evaporative cooling medium, and said second attachment unit directs said cooled output.

5. The apparatus of claim 1, said first attachment unit comprising:

a burner, positioned in a heater box, that receives and burns fuel to heat said base unit output; and

a register that permits outward flow of said heated output while restricting physical access to said first attachment unit.

6. The apparatus of claim 5, further comprising a spark arrestor that prevents ignited debris produced by said burner from exiting said apparatus with said heated output.

7. The apparatus of claim 1, said first attachment unit comprising:

a control system comprising an ignition module and a flame sensor module, connected to an igniter unit, that monitors at least one differential pressure sensor, an over-temperature pressure sensor and a flame sensor to control a main control valve; and

a differential pressure control configured to control operation of a blower in said single base unit.

8. The apparatus of claim 1, further comprising:

an adjustable flow valve that allows a user to set a heat level in a prescribed range; and

a maximum flow valve that limits said heated output from exceeding a prescribed level.

9. The apparatus of claim 1, wherein a prescribed range of said heated output range is 75,000 BTU/hour to 200,000 BTU/hour, and a maximum level of said heated output is 200,000 BTU/hour.

10. The apparatus of claim 1, wherein apparatus is stationary.

11. The apparatus of claim 1, further comprising wheels that allow movement of said apparatus.

12. The apparatus of claim 1, wherein said apparatus can be converted to a heating mode by connecting a fuel supply to said single base unit and affixing said first attachment unit to said single base unit.

13. The apparatus of claim 1, wherein a power supply is provided to an igniter and at least one control circuit in said first attachment unit.

14. The apparatus of claim 1, wherein a snout is attached to receive said output of said single base unit, said second attachment unit is affixed to one of said single base unit and said snout, in order to convert said apparatus to an evaporating cooling mode, and a power supply is attached to a sump that pumps a water supply through said single base unit.

15. The apparatus of claim 2, wherein at least one first pulley is engaged to operate said blower at a first speed, and at least one second pulley is engaged to operate said blower at a second speed.

16. The apparatus of claim 15, wherein said at least one first pulley and said at least one second pulley are positioned on a double pulley device attached to said blower and said motor, a first belt is configured to be attached to said at least one first pulley and a second belt is configured to be attached to said at least one second pulley.

17. The apparatus of claim 1, further comprising a switch that is attached to said first attachment unit in a heating mode and to a sump in said single base unit in an evaporative cooling mode.

18. The apparatus of claim 3, wherein said fuel source is one of liquid propane and natural gas.

19. A means for adjusting ambient air temperature, comprising:

a single base means for receiving an input at said ambient air temperature and generating a base unit output;

a first attachment means for receiving said base unit output and generating a heated output, attachable to said single base unit; and

a second attachment means for receiving said base unit output and outputting a cooled output, attachable to said single base unit.

20. A method of converting an apparatus to a cooling unit from a heating unit, comprising:

- (a) removing a modular heating shell;
- (b) electrically disconnecting a heater from said apparatus;
- (c) removing a modular heating attachment including said heater from said apparatus;
- (d) attaching a cooling attachment to said apparatus; and
- (e) electrically connecting a cooler to said apparatus.

21. The method of claim 20, wherein at said (d), a cooling speed of a blower is set to be greater than a heating speed of said blower.

22. The method of claim 20, wherein said (b) comprises electrically disconnecting an igniter and at least one safety controller from said apparatus.

23. The method of claim 20, wherein said (c) comprises removing a heater box and a fuel supply from said apparatus.

24. A method of converting an apparatus to a heating unit from a cooling unit, comprising:

- (a) removing a cooling attachment from said apparatus;
- (b) attaching a fuel source to said apparatus;

(c) attaching a modular heating attachment to said apparatus; and

(d) electrically connecting a heater to said apparatus.

25. The method of claim 24, wherein at said (c), a heating speed of a blower is set to be greater than a cooling speed of said blower.

26. The method of claim 24, wherein said (d) comprises electrically connecting an igniter and at least one safety controller to said apparatus.

27. An apparatus for adjusting ambient air temperature, comprising:

a single base unit, configured to receive an input at said ambient air temperature and generate a base unit output; and

an attachment unit, attachable to said single base unit and configured to receive said base unit output and one of generate one of a heated output and output a cooled output generated in the single base unit.

28. The apparatus of claim 27, said single base unit comprising:

a blower that operates in accordance with a motor, wherein at least one first pulley is engaged to operate said blower at a first speed, and at least one second pulley is engaged to operate said blower at a second speed;

a detachable fuel source to provide a heating fuel to said attachment unit;

a water reservoir configured to hold a prescribed volume of water;

a sump that pumps said water from said water reservoir to at least one drip source positioned at an upper edge of said single base unit; and

at least one evaporative cooling medium, positioned within a frame of said single base unit, that receives said water from said drip source, wherein said ambient air is evaporatively

cooled at said at least one evaporative cooling medium, and said attachment unit directs said cooled output.

29. The apparatus of claim 27, said attachment unit comprising:

a burner, positioned in a heater box, that receives and burns fuel to heat said base unit output; and

a register that permits outward flow of said heated output while restricting physical access to said first attachment unit.

30. The apparatus of claim 27, wherein a power supply is switchably provided to one of:

an igniter and at least one control circuit in said attachment unit; and

a sump that pumps a water supply through said single base unit.

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